

CISC 3667: Game Design and Development

In-Class Activity 4: Feedback Loops in Games

Assigned: Tuesday, September 22

Submission: Brightspace by 11:59 PM (Individual Submission)

Objective

Understand how positive and negative feedback loops influence game balance, pacing, and player experience. Analyze how game mechanics reinforce or counteract changes within a game system.

Instructions

1. Work with a partner or small group.
2. Choose one game that you know well enough to analyze and identify at least **one positive or negative feedback loop** in your chosen game. You may analyze both types if you can identify them.
3. Describe the game mechanic that creates the feedback loop and explain how it influences gameplay and player experience.
4. Use specific examples from the game to support your analysis.

Key Concepts

- **Positive Feedback Loop (Reinforcing):** A change produces effects that reinforce or amplify the original change. Positive feedback can create momentum, snowballing, or runaway advantages.
- **Negative Feedback Loop (Balancing):** A change produces effects that counteract or reduce the original change. Negative feedback can encourage balance, catch-up opportunities, and closer competition.

Remember: Both positive and negative feedback loops can be useful in game design. Their effects depend on how the designer implements them and the experience they want to create.

Step 1: Choose a Game

Choose one game you know well enough to analyze that **contains a notable positive or negative feedback loop**.

Your game may be a video game, board game, card game, tabletop game, sports game, or another type of game.

Use the following examples as a guide for the type of analysis expected:

- **Monopoly: Positive Feedback Loop (Snowball Effect)**
 - **Game Mechanic:** Players **collect rent when opponents land on their properties**.
 - **Feedback Loop:** A player who **owns more properties has more opportunities to collect rent**. The additional money **allows them to purchase more properties, which can generate even more rent**.
 - **Effect on Gameplay:** The **player who is already ahead can keep increasing their wealth**, while opponents lose money when they land on those properties. This can create a **growing advantage and make it harder for other players to catch up**.

- **Mario Kart: Negative Feedback Loop (Balancing Effect)**
 - **Game Mechanic:** Players who **fall behind can receive more powerful items**, such as the Bullet Bill.
 - **Feedback Loop:** **Falling behind increases the likelihood of receiving items that help the player catch up**. These items can **reduce the distance between trailing players and the leaders**.
 - **Effect on Gameplay:** The mechanic helps **keep the race competitive by giving players who are behind an opportunity to recover**. This can create suspense and prevent the race from becoming decided too early.

Important: You do not need to identify both types of feedback loops if your chosen game does not clearly contain both. Focus on the loop(s) you can support with specific examples from the game.

Step 2: Analyze Your Game

Identify **at least one positive or negative feedback loop**, describe the **specific mechanic that creates it**, and explain its **effect on gameplay and the player experience**.

Feedback Loop Analysis

Game: _____

Type of Loop	Describe the Feedback Loop	Effect on Gameplay or Player Experience
Positive Feedback Loop (if identified)		
Negative Feedback Loop (if identified)		

Analysis Requirements:

- Identify the specific game mechanic that produces the feedback loop.
- Explain the cause-and-effect relationship between the mechanic and its outcome.
- Describe how the feedback loop influences the game's balance or progression.
- Explain how the feedback loop affects the player's experience.

You do not need to identify both types of feedback loops if your chosen game does not provide a clear example of both. Focus on explaining at least one loop in sufficient detail.

Step 3: Reflection

Answer the following questions based on your analysis.

1. Feedback and Balance

Does the feedback loop push the game toward a stable, balanced state, or does it amplify differences between players or game elements? Explain your answer.

2. Player Experience

How does the feedback loop affect the player's experience? Does it create excitement, tension, momentum, frustration, or opportunities for recovery? Support your response with a specific example.

3. Design Adjustment

If you could modify the feedback loop, what would you change to improve or alter the game's balance, pacing, or player experience? Explain your reasoning.

4. Design Trade-Off

What is one potential drawback of your proposed adjustment? Explain how changing the feedback loop might improve one aspect of the game while negatively affecting another.

Submission

Each student must submit their own copy of the completed activity to Brightspace by 11:59 PM on Tuesday, September 22.

Your submission should include:

- **Your name**
- **Your group members' names**
- Your chosen game
- Your completed **Step 2: Analyze Your Game**
 - Identification of at least one feedback loop (positive or negative)
 - Description of the game mechanic that creates the loop
 - Explanation of the cause-and-effect relationship
 - Analysis of the effect on gameplay and player experience
- Your completed **Step 3: Reflection**, including responses to all four questions.

Important: This is a **partner/group activity**, but submissions are **individual**. Every student must submit their own copy of the completed activity to Brightspace. Group members may collaborate on the game analysis, but **each student is responsible for submitting their own work and ensuring that their submission is complete.**

Deadline: Tuesday, September 22, by **11:59 PM**.